

REMARKS

By the present amendment, Applicant has amended Claims 1 and 6, and cancelled Claims 2-5, 7 and 8. Claims 1 and 6 remain pending in the present application. Claim 1 is the only independent claim.

Claims 5-8 were held withdrawn from consideration by the Examiner as being directed to non-elected species of the invention. It is proposed herein that claims 5, 7 and 8 be cancelled. However, it should be noted that under the provisions of 35 U.S.C. § 121 Applicant reserves the right to file a divisional application directed to the non-elected subject matter. Claim 6 has been amended to read on the elected species of Figs. 1A, 1B, 1C and 1D, and has been retained in the present application.

In the recent Office Action the Examiner rejected Claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Bevalacqua et al. (US 4,645,140). Claims 1-3 were rejected as being anticipated by Robertson (4,577,462). Claims 1-3 were rejected as being anticipated by Banthin (US 4,095,417). Claims 1-3 were also rejected as being anticipated by Japanese patent No. JP 2000-16392. Claims 1-4 were rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Japanese patent No. JP 2000-16392 in view of Japanese patent No. JP 8-19551. Claims 1-4 were rejected by the Examiner under 35 U.S.C. § 103(a)

as being unpatentable over Berliner (US 2,546,293) in view of Japanese patent No. JP 8-19551.

Applicant has amended Claim 1 to include the subject matter of cancelled dependent Claim 4, and has further amended Claim 1 to more clearly define Applicant's invention. Applicant will advance arguments hereinbelow to illustrate the manner in which the presently claimed invention is patentably distinguishable from the cited and applied prior art. Reconsideration of the present application is respectfully requested.

Initially, it is pointed out that the patent to Berliner (US 2,546,293), applied by the Examiner in the rejection of Claims 1-4, has not been cited on a Notice of References Cited, form PTO-892.

Since the subject matter of Claim 4 has been incorporated into independent Claim 1, the Examiner's rejections of Claim 4 will be reviewed. As noted above, Claims 1-4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese patent No. JP 2000-16392 in view of Japanese patent No. JP 8-19551. Claims 1-4 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Berliner (US 2,546,293) in view of Japanese patent No. JP 8-19551. Japanese patent No. JP 2000-16392 discloses a watercraft exhaust having an attachment 2, with a lip 2c. Lip 2c has a straight slit 4 that remains closed when

the internal pressure within the exhaust is equal to or less than the external pressure, and is opened if the internal pressure is greater than the external pressure. The attachment 2 thereby prevents the reverse flow of water into the exhaust, and suppresses the reflecting noise of the exhaust gas. The Patent to Berliner discloses a variable area tail pipe for a jet engine. Berliner teaches a jet engine tailpipe, which may have a forward portion 2 with a circular cross-sectional shape, and a rearward portion that has a laterally-elongated, flattened shape 4. Berliner's device may be used to alter the shape of the tailpipe rearward portion 4, by forcing the walls 8 toward each other by the disclosed means. Neither the Japanese patent No. JP 2000-16392 nor the patent to Berliner discloses an attachment having a generally elongated S-shaped slit having inwardly and outwardly opposing portions defined therein, wherein said attachment and said generally elongated S-shaped slit are dimensioned and configured for expelling the exhaust from said conduit in a three dimensional helical pattern. Recognizing this deficiency in the teachings of Berliner and JP 2000-16392, the Examiner turns to the teachings of Japanese Patent No. JP 8-19551. The Examiner states: "JP 8-19551 teach a gas outlet valve 20 with an S-shaped outlet 28, 29 is old and well known in the art" (Office Action, p. 5, lines 3-5 and lines 16-17). However, a review of the JP 8-19551 patent reveals that this is not a "gas outlet valve", as the Examiner asserts, but a self-sealing flexible elastic valve and surgical trocar. JP 8-19551 discloses a flexible valve 20, or seal, that allows a surgical trocar plug to be inserted through the valve 20, during a surgical procedure. The valve is constructed so that it may be extended due to

its flexibility, when a surgical apparatus 40, such as a trocar plug, is inserted through the valve 20 and S-shaped slit 29. The slit 29 and walls 25, 26 then seal around the surgical instrument to maintain gas pressure during a laparoscopic surgical treatment. The Examiner believes that it would have been obvious to modify the Japanese patent No. JP 2000-16392 by replacing the outlet slits of JP 2000-16392 with an S-shaped slit according to the teachings of JP 8-19551, or to modify the variable tailpipe section of Berliner, so as to incorporate an S-shaped slit as taught by JP 8-19551. Applicant does not agree with the conclusions of the Examiner.

In this regard, the teaching reference, Japanese patent no. JP 8-19551, is not at all what the Examiner says it is. JP 8-19551 is to an invention non-analogous to, and not reasonably pertinent to the particular problem with which the inventor herein is concerned. Nor, is the JP 8-19551 patent reasonably related to the subject matter of the basic references, JP 2000-16392 and Berliner. Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). The only suggestion or motivation for modifying JP 2000-16392 or Berliner with

the teachings of JP 8-19551, as proposed by the Examiner, stems from hindsight knowledge derived from the Applicant's own disclosure. There is simply no teaching, suggestion, motivation or incentive in the applied references, which would have led one of ordinary skill in the art to combine the teachings of JP 2000-16392, Berliner and JP 8-19551 in the manner urged by the Examiner. In fact, given the diversity between the subject matter of the basic references and the teaching reference, it is not seen how either the Berliner patent or the JP 2000-16392 Japanese patent could be modified by the device of JP 8-19551, which is designed for forming a tight seal around a surgical instrument during a laparoscopic procedure, and is not "a gas outlet valve", as the Examiner suggests.

MPEP § 2143 states: "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." There is nothing in the teachings of the relied upon prior art references which would have suggested the obviousness of the Examiner's

modifications of the exhaust outlet structure of JP 2000-16392 or the variable area tail pipe of Berliner. It is only by impermissible hindsight and reliance on Applicant's own disclosure that the Examiner would have been led to reconstruct these references so as to derive Applicant's claimed propulsion system from the applied teachings. It is therefore Applicant's conclusion that the combined teachings of JP 2000-16392, Berliner and JP 8-19551 fail to establish a *prima facie* case of obviousness.

The Bevalaqua patent relied upon by the Examiner in a rejection of Claims 1-3, the Robertson patent relied upon in a rejection of Claims 1-3, the patent to Banthin relied upon in a rejection of Claims 1-3 and the references made of record in the application but not applied by the Examiner in any rejections have also been carefully reviewed, however, Applicant finds nothing therein which would overcome or supply that which is lacking in the basic combination of the other applied prior art noted above.

The claims in this application have been revised to more particularly define Applicant's unique construction in view of the prior art of record. Reconsideration of the claims in light of the amendments and for the above-noted reasons is respectfully requested.

Application No.:10/677,800
Art Unit:3746

Attorney Docket No.:21530.00
Confirmation No.:9657

For the foregoing reasons, Applicant respectfully submits that the present application is in condition for allowance. If such is not the case, the Examiner is requested to kindly contact the undersigned in an effort to satisfactorily conclude the prosecution of this application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert W. Gibson". The signature is stylized with a large, looped initial "R" and a cursive "W".

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